

1 **IN THE CLAIMS:**

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3 Listing of the Claims:

4 1. (Original) A diverter for a projectile, comprising:

5 a header assembly providing a mounting surface and support for a plurality of
6 electrical leads;

7 a reactive semiconductor bridge mounted on the mounting surface of the header
8 assembly and providing an electrical path for the electrical leads at a certain voltage
9 across the bridge;

10 a diverter body supporting the header assembly and containing a prime, wherein
11 the reactive semiconductor bridge and the prime define a gap; and

12 an end cap attached to the diverter body and containing a propellant, wherein the
13 rapid burning of the propellant produces gases, which eject the end cap from the
14 diverter body to produce a force to divert the projectile.

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16 2. (Original) A diverter for a projectile, comprising:

17 a mounting surface with a plurality of conductive paths;

18 a header assembly providing support for a plurality of electrical leads, wherein
19 one electrical lead connects to one of the plurality of conductive paths and another
20 electrical lead connects to another one of the plurality of conductive paths;

21 a semiconductor bridge mounted on the mounting surface and providing along
22 with the conductive paths an electrical path from one electrical lead to another electrical
23 lead when a certain voltage is applied across the semiconductor bridge;

24 a diverter body supporting the header assembly and containing a prime, wherein
25 the mounting surface is located at the exit end of the diverter body, and wherein the
26 semiconductor bridge and the prime define an ignition source; and

27 a propellant beneath the prime which rapidly burns once the prime ignites such
28 that the propellant produces gases producing a force out of the exit end of the diverter
29 body to divert the projectile and a force retaining un-burnt propellant in the diverter
30 body.

1 3. (New) The diverter of claim 1, further comprising a thermal closure that
2 seals and holds the propellant in the end cap.

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4 4. (New) The diverter of claim 3, wherein the thermal closure is an adhesive
5 backed paper closure sealing and holding the propellant in place during assembly of the
6 diverter.

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8 5. (New) The diverter of claim 1, wherein the diverter body includes an
9 undercut such that the mouth of the diverter body is smaller than the base to hold the
10 prime in place.

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12 6. (New) The diverter of claim 1, further comprising an electrical shunt
13 providing an electrical short when attached to the plurality of electrical leads for safe
14 handling of the diverter.

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16 7. (New) The diverter of claim 1, further comprising shrink tubing for
17 insulating each of the plurality of the electrical leads to prevent shorting to the diverter
18 body.

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20 8. (New) The diverter of claim 7, further comprising a potting material for
21 retaining the shrink tubing and filling a gap between the shrink tubing and the diverter
22 body.

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24 9. (New) The diverter of claim 1, further comprising an adhesive bonding
25 material between the end cap and the diverter body to bond the end cap to the diverter
26 body until the time that the end cap is ejected.

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28 10. (New) The diverter of claim 1, wherein the prime is zirconium potassium
29 perchlorate and the propellant is a mixture of pistol powder and explosive ordnance
30 material.

1 11. (New) The diverter of claim 2, further comprising a nozzle attached to the
2 exit end of the diverter body to increase the impulse.

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4 12. (New) The diverter of claim 2, wherein the mounting surface is a printed
5 circuit board.

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7 13. (New) The diverter of claim 2, further comprising an insulating sleeve for
8 each of the plurality of the electrical leads to prevent shorting to the diverter body.

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10 14. (New) The diverter of claim 2, wherein the prime is zirconium potassium
11 perchlorate and the propellant is a mixture of pistol powder and explosive ordnance
12 material.

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14 15. (New) The diverter of claim 2, further comprising an end closure attached
15 to the exit end of the diverter body.

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17 16. (New) The diverter of claim 15, wherein the prime contacts the
18 semiconductor bridge and the end closure is adjacent to the mounting surface.

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20 17. (New) The diverter of claim 15, wherein the end closure is metal and
21 crimped to the diverter body.

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23 18. (New) The diverter of claim 2, wherein one of the plurality of electrical
24 leads is tied to the diverter body.

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